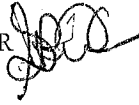


CHEVY CHASE VILLAGE
BOARD OF MANAGERS
SEPTEMBER 12, 2011 MEETING

STAFF REPORT

TO: BOARD OF MANAGERS
FROM: SHANA R. DAVIS-COOK, VILLAGE MANAGER 
DATE: 9/1/2011
SUBJECT: PURCHASE AUTHORIZATION AND SUPPLEMENTAL APPROPRIATION REQUEST
—POLICE RADIOS

At the Board's Meeting on September 12, 2011, Board Liaison Gary Crockett will present information he has researched regarding the Village's required purchase of new radios for the police and communications departments. (Please also see Mr. Crockett's two attached emails regarding same.)

The Board approved in the FY2012 Budget a capital expenditure totaling \$50,000 for the Police/Communications Equipment—Police Radios. This purchase was projected to straddle into FY2013, with an additional \$67,000 estimated in the second year.

Approximately \$4,500 of the purchase cost will be reimbursed to the Village through a grant from the Urban Area Security Initiative (UASI), which is administered through the Federal Emergency Management Agency.

Action Requested

Pursuant to Mr. Crockett's email dated July 27, 2011, Board action is requested:

1. for a supplemental appropriation from *SafeSpeed* Program reserves in the amount of \$13,325 for the purchase of police radios and related accessories from *Motorola, Inc.*; and
2. to authorize the Village Manager to purchase no more than twelve radio units and related accessories from *Motorola Inc.* in the amount of \$63,325.

Attachments

CIP Expenditure Detail Sheet
Proposal from *Motorola, Inc.*
Email from Gary Crockett, dated 7/18/2011
Email from Gary Crockett, dated 7/18/2011

Expenditure Detail Sheet

Police/Communications Equipment

Category	Equipment	Date Last Modified	February 14, 2011
Department	Police/Communications	Funding Source	Tax-Based/ <i>SafeSpeed</i>
Zone Location	3	Status	Ongoing

EST. EXPENDITURE SCHEDULE (dollars in thousands)

Equipment Type	Total	Est. FY11	Total 6 Years	FY12	FY13	FY14	FY15	FY16	FY17	Beyond 6 Years
Police Radios	117	0	117	50	67	0	0	0	0	0
Bullet proof vests	6.6	1.2	5.4	0	1.2	1.8	1.2	1.2	0	6.4
Mobile Data Terminals	15.2	0	15.2	0	3.8	3.8	3.8	3.8	0	0
Total	138.8	1.2	137.6	50	72	5.6	5	5	0	6.4

EST. FUNDING SCHEDULE (dollars in thousands)

Tax-Based	0.6	0.6	0	0	0	0	0	0	0	0
<i>SafeSpeed</i>	18.2	0	18.2	0	4.4	5	4.4	4.4	0	3.8
Grants/Reimbursements	120	0.6	119.4	50	67.6	0.6	0.6	0.6	0	2.6
Total	138.8	1.2	137.6	50	72	5.6	5	5	0	6.4

EST. OPERATING BUDGET IMPACT (dollars in thousands)

Labor/Maintenance			0	0	0	0	0	0	0	0
Materials/Equipment			0	0	0	0	0	0	0	0
Total			0	0	0	0	0	0	0	0

Description

This equipment will ensure the continuity of operation of Village government while ensuring that the services Village residents have come to rely on such as 24/7 police patrols, house checks, speed and stop sign enforcement. Due to this equipment being used for pedestrian, vehicular and public safety needs a certain percentage of the expenditures would be eligible to be paid out of the *SafeSpeed* revenues.

- Currently, all Police and Fire/Rescue Agencies will possibly be required to switch radio frequencies due to FCC regulations in the next 1-3 years; however, re-banding of current radios is not a feasible long term option. In an effort to ensure that all Police and Fire/Rescue Agencies are operable after the transition Urban Area Security Initiative (UASI) grant will be made available to pay for the transition.
- Due to federal standards bullet proof vest must be replaced every five (5) years.
- As part of regularly schedule phase out as equipment lifespan dictates Police Mobile Data Terminals (MDTs) would be replaced and/or refurbished.

Estimated Schedule

This equipment would be purchased on an as needed basis and as the equipment's lifespan dictated. Due to manufacture standard bullet vests must be replaced every five (5) years.

Cost Change

There have been no cost changes.

Justification

This equipment will ensure the continuity of operation of Village government while ensuring that the services Village residents have come to rely on such as 24/7 police patrols, house checks, speed and stop sign enforcement are maintained.

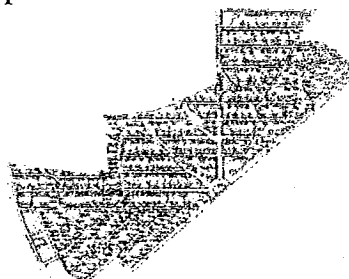
Other Disclosures

None

Coordination

Board of Managers
Administration/Capital Contracts
Police Department
Public Safety Committee

Map



**MOTOROLA**

Quote Number: QU0000156693

Effective: 15 AUG 2011

Effective To: 30 OCT 2011

All-To:

CHEVY CHASE VILLAGE
5906 CONNECTICUT AVE
CHEVY CHASE, MD 20815
United States

Ultimate Destination:

CHEVY CHASE VILLAGE
5906 CONNECTICUT AVE
CHEVY CHASE, MD 20815
United States

Attention:

Name: Sgt. Adventino Dasilva
Email: Tino.dasilva@montgomerycountymd.gov
Phone: (301) 654-7300

Sales Contact:

Name: Michael Janson
Email: mike.janson@teltronic.com
Phone: 3015753970

Request For Quote: Chevy Chase PD APX
Contract Number: MARYLAND CONVENIENCE
Freight terms: FOB Destination
Payment terms: Net 30 Due

Item	Quantity	Nomenclature	Description	List price	Your price	Extended Price
1	12	H98UCH9PW7AN	APX6000 700/800 MODEL 3 PORTABLE	\$2,600.00	\$2,080.00	\$24,960.00
1a	12	H38BT	ADD: SMARTZONE OPERATION	\$1,200.00	\$960.00	\$11,520.00
1b	12	Q361AR	ADD: P25 9600 BAUD TRUNKING	\$300.00	\$240.00	\$2,880.00
1c	12	Q806BM	ADD: ASTRO DIGITAL CAI OPERATION	\$515.00	\$412.00	\$4,944.00
1d	12	QA00580AC	ADD: TDMA OPERATION	\$400.00	\$320.00	\$3,840.00
	12	H869BZ	ENH: MULTIKEY	\$330.00	\$264.00	\$3,168.00
1f	12	Q15AK	ENH: AES/DES,DES-XL,DES-OFB	\$799.00	\$439.20	\$5,270.40
1g	12	QA01749AB	ADD: ADVANCED SYSTEM KEY - SOFTWARE KEY	-	-	-
1h	12	QA00582AB	ALT: LITHIUM ION 4000MAH IMPRES FM	\$130.00	\$104.00	\$1,248.00
1i	12	QA01771AB	ENH: ENHANCEMENT LEVEL 2	\$200.00	\$160.00	\$1,920.00
2	11	NNTN7038A	BATT IMP STD IP67 LIION 2900M 3100T	\$140.00	\$107.80	\$1,185.80
3	11	PMMN4062A	PLUS RSM NC IP54 3.5MM JACK RX	\$107.00	\$82.39	\$906.29
4	12	NNTN7080A	APX 7000 IMPRES SINGLE UNIT CHARGER US/NA/CA/LA	\$125.00	\$96.25	\$1,155.00
5	10	NTN9179A	HI ACTI SWIVEL D CLIP & BL	\$42.00	\$32.34	\$323.40

Total Quote in USD**\$63,320.89**

* This quote contains items with approved price exceptions applied against it

Make Purchase Order out to: Motorola Inc. Mike Janson MR0220
7031 Columbia Gateway Drive
Columbia, Maryland 21046

Freight terms are FOB Destination; Title and Risk of Loss pass upon delivery. Invoice terms are Net 30; upon delivery

Quotes are exclusive of all installation and programming charges(unless expressly stated) and all applicable taxes.

Purchaser will not be responsible for shipping costs.

From: Gary Crockett [gbcrockett@gmail.com]
Sent: Monday, July 18, 2011 4:47 PM
To: Allison Shuren; David Winstead; Lawrence Heilman; Pat Baptiste; Peter Kilborn; Richard Ruda
Cc: Davis-Cook, Shana; Younes, Michael; Samandpol@aol.com; Dasilva, Tino; Goodman, Saul
Subject: Village Police radios

Board members,

A month or two ago Sam Lawrence asked me, as the self-described "techie" on the Board, to review an upcoming budget item for new police radios. It's pretty substantial; a bit over \$100,000 over two years. I did a little online research and met with Michael Younes and Tino DaSilva to discuss it. I've since discussed the issue informally with a few Board members, but I thought I should supplement that with this memo. Michael is the one who is most up-to-date on the details of what I'll describe here, and I invite him to provide any corrections or updates.

What's driving the radio replacement is the FCC's decision to reallocate some radio spectrum, partly to provide more capacity for cell phone service and partly to encourage consolidation of emergency service communications. This was motivated in part by Hurricane Katrina, which made it obvious that in most places the police, fire department, FEMA, and other emergency responders all use incompatible communications technology, making coordination very difficult.

What this means to us is that a little less than two years from now the radio frequencies our police are currently using will be owned by Sprint, and the existing radios will become effectively useless. Some temporary workarounds are possible during the transition period, but our existing radios are at the end of their support life from Motorola and won't be modified or upgraded to the new frequencies and protocols. So we need to replace them.

As to the question of what radios we should buy, we don't have much real choice. We're talking about 18 radios at the most (more on this below), whereas Montgomery County will be buying about 1500. Getting the same radios the County uses means not only that we get the benefit of their volume discount, but perhaps more important, we will have access to their repair and service operation for the radios and batteries. This will save us more over the radios' lives than we could possibly gain from shopping around. The County is buying Motorola APX 6000s, so that's what we need as well. These things are surprisingly expensive; about \$8000 apiece retail, \$6000 with the County's discount.

When I talked to Michael and Tino, we thought that there was a good chance of getting Homeland Security money for the radio upgrades under their Urban Area Security Initiative program. The city of Rockville prepared a grant application on behalf of all the affected municipalities in the County. I've since been told that the application was rejected and that in the current Federal budget climate the tooth fairy is unlikely to get a fresh supply of quarters. So at the moment this looks like a Village budget item.

The one bit of control we may have is on the question of how many radios to buy. The proposed budget numbers assume radios in all of our police cars and a portable unit for each police officer. Larry Heilman has suggested that we could reduce the expense by having a pool of radios that are checked in and out when officers go on and off duty, so rather than needing a radio for each officer we'd need only enough for the maximum number we expect to be on duty at the same time. I don't have a position on that question at this point. It will need some more investigation. Questions include what the County practices require (for example, emergency

procedures may assume the ability to identify an officer by the radio he/she is using) and how many simultaneously on-duty officers we might have in a major emergency.

Nary Crockett

From: Gary Crockett [gbcrockett@gmail.com]
Sent: Wednesday, July 27, 2011 5:42 PM
To: Allison Shuren; David Winstead; Lawrence Heilman; Pat Baptiste; Peter Kilborn; Richard Ruda
Cc: Davis-Cook, Shana; Younes, Michael; Dasilva, Tino; Protos, Demetri; Goodman, Saul; Samandpol@aol.com
Subject: Police Radios

CCV Board:

At Shana's request I met this morning with her, Michael Younes, Tino DaSilva, and Demetri Protos to discuss some updated information about the police radios we're going to need to buy. This email may be a little long, so let me give the bottom line up front:

Because of pared-back radio quantities and favorable pricing news, the cost we're looking at is a little less than half of what was originally proposed (which was \$117K over two years). The County and the other municipal police departments are moving ahead rapidly with the radio replacements, and if we ride that wave we probably can get some additional discount. With these two facts in mind the staff would like to propose for Board action at the September or October meeting that we proceed with the radio acquisitions in this fiscal year rather than spread over two years as previously proposed. Currently there's \$50K in this year's budget for radios and \$5K for other unspecified police technology. Doing all the purchases this year might fit within that total or might exceed it by \$5K or so, enough to require Board approval of the supplementary amount, but we won't know for sure until we actually move forward with an order and see what the discount level will be.

I favor proceeding as the staff now suggests. Following is more detailed information.

Radio Quantities:

The current budget was based on buying 18 radios:

- 11 for police officers, including Corporal, Sergeant, and Chief (an individual radio assigned to each officer)
- 4 for radios in the police cruisers
- 1 for the dispatcher (to allow mobility within the building)
- 1 for Michael Younes (required because in emergency situations he will be coordinating Village response from the County's Emergency Operations center)
- 1 spare

Not included in this total is the console radio in the Communications Center used for communication with the County's operations center and Village officers. This will need to be upgraded eventually also, but the County's schedule for this is enough later that it will be a separate budget item.

The new proposal is for 12 radios. One of the 11 for police officers is eliminated because one officer position is vacant and not authorized for filling. The staff determined that the 4 police cruiser radios can be eliminated as long as procedures call for officers to always carry spare batteries for their portable radios. Finally, the spare can be eliminated for reasons to be described below.

Some on the Board had suggested that the number of radios for police officers could be reduced by going to a sign-out system rather than assigning individual radios to officers. The staff is not recommending this and I agree with the recommendation. I'll discuss the reasons in detail below.

Better Pricing:

County-wide there have been over 1500 radios purchased, and based on this volume the County (and we) get a 20% discount. Our budget was prepared based on a discounted price of \$6500 per radio, including required accessories. It turns out that this was a misunderstanding and in fact \$6500 is the list price, so our discounted price is approximately \$5200. Recent purchases by other municipalities in the County, though, have gotten higher discounts, as much as 27%, probably to encourage buying sooner. This is the main reason the staff suggests doing all the purchases this year rather than spreading over two years as originally proposed. They have

also been able to reduce the cost modestly by making some changes to the configuration and accessories (such as the type of cord) for the radios.

Combining this pricing information with the reduced quantity, instead of the original \$117K we're probably looking at somewhere from \$54K to \$62K, depending on the actual discount level we can get when we place our order or orders.

Sign-Out Proposal: The Quantity Question

In the new proposal most of the radios (10) are for police officers and the Chief, many of whom are off-duty at any given time, so it is sensible to ask whether we could have a pool of fewer than 10 radios, with officers checking them in and out as they go on and off duty. Before going into the more complex issues with this proposal, I'll start with the simple one. Police shifts overlap enough that it's questionable how many radios we could save by going this way. Tino DaSilva told me that in the course of ordinary, non-emergency work it's not unusual for six officers, including the Chief of Police and Corporal, to all be on duty at the same time for brief periods at shift change times. The real issue comes in case of emergency situations when the police might go to 12-hour shifts. In that event it's not hard to imagine needing all 10 radios for brief periods. Even if detailed analysis told us that we could get by with two or three fewer, the potential savings might not be enough to justify taking on the issue I'll describe next.

Sign-Out Proposal: The Distress Response Issue

I had assumed that police radios had GPS units so that if an officer in distress pressed the Emergency button the dispatcher or County operations center could locate the radio and send help. In this case there would be no need to know which officer had the radio; the only important thing would be that the Emergency button on Village radio #4 had been pressed, so help should be sent to the radio's location.

It turns out that's not how things work at all. It is officers, not radios, whose location is tracked by the dispatcher and County operations. And they can't track where the officer is, only where the officer is supposed to be. So when an officer goes on or off duty, the dispatcher reports this fact, resulting in an update to the County's computer system. If the officer reports a disturbance at some address or is sent to some address by the dispatcher, that results in an update to the officer's location information in the County computer.

The radios have the officers' call signs ("9-M-6", for example) programmed into them so that when the Emergency button is pressed that call sign is sent to the County computer, that officer's last known location pops up, and that's where help is sent.

It would presumably be possible for the County's computer to be programmed to accept some sort of "Officer 9-M-6 is now using radio CCV-2" message and store the information so that it would still be able to look up the correct officer's location if an emergency message is received from radio CCV-2. But the County computer does not have that functionality or the procedures to support it today, and it seems unlikely that the County would spend the money to do that programming and add those procedures just to save the cost of a radio or two for the Village.

So our MOU with the County requires that each officer have a radio programmed with that officer's call sign. I think that as a practical matter that rules out the sign-out proposal.

Why We Don't Need A Spare:

Because of the association of each radio with an officer, before a spare radio can be used it needs to be programmed with the call sign of the officer who will use it. That is not something we can do ourselves; it is done at the County's radio repair center. The repair center would have spares and could program one to serve as a temporary replacement if we take in a broken radio that can't be fixed immediately. Since getting a usable radio requires a trip to the repair center whether or not we have our own spare, the spare does us little or no good.

Gary Crockett

